

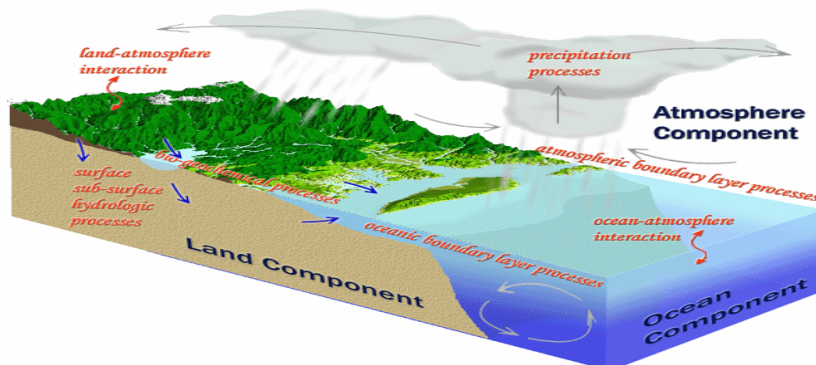
# Final Assignment

## Topic

Work and services provided in Flood Management-I Directorate of Central Water Commission, Min. of Water Resources River Development and Ganga Rejuvenation, Govt. of India.

## Course

Distance Learning Course in Hydrology: Basic Hydrologic Sciences for the Asian Region (2017)



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## **Introduction**

In this assignment the work responsibilities and services provided in Flood Management –I directorate of Central Water Commission, Govt. of India are discussed. Flood Management – I directorate of CWC is involved in some of the most important tasks allocated to CWC by Min. of Water Resources River Development and Ganga Rejuvenation, Govt. of India. One of the important works that has been allotted to this directorate is techno-economic appraisal of flood management projects of all over India except in North East and projects allocated to Ganga Flood Control Commission. Further the monitoring of progress is regularly monitored by this directorate with the help of information from field formation of CWC, the financial and physical progress is monitored and kept up to date record for ready reference of the Govt. of India. Also this directorate is involved in work of some of the committees formed by Min of Water Resources, National Green Tribunal etc. to perform specific tasks. Also this office provides input to Bureau of India Standards (BIS) for preparation of standard codes of practice in relation to flood management works.

The second part of this document discusses the data required for the works done in this office and the limitations/improvements suggested for improving efficiency of work.

## **Work responsibilities and Services provided at Flood Management-I Directorate.**

Flood Management-I (FM-I) Directorate, deals with appraisal & monitoring of flood management projects. These projects are taken up under the Flood Management Programme of Ministry of Water Resources River Development and Ganga Rejuvenation, Govt. of India in respect of States of Jammu & Kashmir, Punjab, Himachal Pradesh, Delhi and certain stretches of Haryana & Uttar Pradesh. This works involves detailed examination of Detailed Project Report (DPR) of the schemes, co-ordination among different appraising Directorates of Central Water Commission (CWC) at Head-quarter, New Delhi as well as field organisation of CWC, processing of proposals received from respective state governments for inclusion of the schemes under Flood Management Programme (FMP) and for release of Central Assistance (CA) towards these schemes.

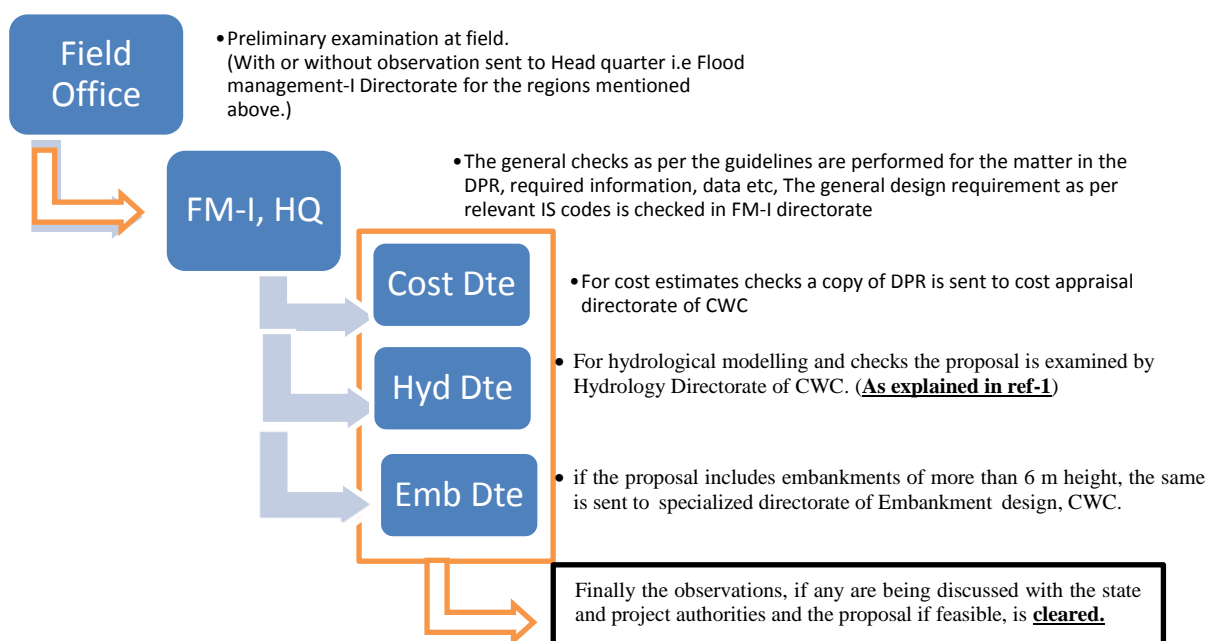
Govt. of India, Guidelines for funding under FMP:-

<b>Criteria</b>	<b>General State</b>	<b>Special State</b>
<b>New Projects to be included</b>		
Cost	>40 Crores	>10 Crores
Cost Sharing (Central:State)	50:50	70:30
<b>Ongoing Projects Sharing</b>		
Cost Sharing (Central:State)	75:25	90:10

If project cost is upto Rs 25 Cr. It is examined at field office itself.

If project cost exceeds above Rs 25 Cr, it is examined as:-

The flow chart for examining are as follows:-



### Techno-Economic Appraisal of DPR at FM-I Dte of CWC

The proposal in final shape is sent for consideration of Technical Advisory Committee(TAC) of Min. of Water Resources for inclusion in FMP.

And if cleared by TAC, the proposal is sent for investment clearance to allot funds from FMP scheme.

Monthly status of technical examination of all the schemes pertaining to these states, at HQ as well as field organisation, and status of release of CA to schemes and their physical and financial progress is also maintained in this Directorate. Presently status of 203 schemes is being maintained by this directorate with respect to technical examination. Further, physical and financial progress of 56 schemes included under FMP is being maintained.

FM-I Directorate is also providing the secretarial assistance to Member (RM), CWC and Chief Engineer, FMO, CWC on various occasions including number of committees such as Yamuna Standing Committee, Ghaggar Standing Committee, Sahibi Standing Committee, Committee on Special Remedial Works for Flood Protection Embankment of rivers Sutlej & Ravi etc.

Further, FM-I directorate is actively involved in Water Resource Directorate of Bureau of Indian Standards, regarding revision of various water resources related IS codes. Director FM-I is the member of panel 1 panel 3 and panel 6 of the WRD 22 Committee of BIS.

### Data sources relied on to accomplish work

For examining DPR- Need of the proposed work, losses incurred in last 10 years- in terms of life, Property, agriculture land, crops etc., benefits expected out of execution of the project,

the economics involved in construction of the work, the hydro meteorological and hydraulic data.

Out of this the data of Hydraulic data like discharge, stage, in some cases rainfall etc. is verified from CWC data.

For status maintaining- Periodic financial and physical updates and monitoring reports from field organizations of CWC.

For Secretarial works of Yamuna Standing Committee- data of the particular proposal along or over the Yamuna river, in North India. This data includes the hydraulic data of the concerned site, the effect of construction on upstream and downstream waterway.

### **Scope of improvement**

Seeing the load of work and skill requirement, deployment of hydraulic modellers will surely improve the efficiency. Along with this engaging persons efficient in using MS excel will also prove beneficial.

### **Summary**

The FM-I deals with one of the most important work assigned to Central Water Commission, through the techno-economic evaluation of the proposals of state govt, FM-I provides necessary input to Govt.of India for justifying the huge investment of the order of 1000s of Crores of Rupees, in Flood Management works through FMP. This enables State Govt. to be more flood resistant and benefit with economic development. The exercise done at this office involves working out the best possible proposal to optimize the amount invested by Central Govt. Further the continuous monitoring of physical and financial progress of the projects ensures that the anticipated benefits are actually realized on filed.

As part of YSC, FM-I directorate provides very useful information, analysis and ensures the best practices being practiced in terms of conserving Yamuna river as per order of NGT.

Also as a part of BIS FM-I gives inputs based on practical experience to be included in preparation of standard codes for practice.

### **References**

1) From this course:-

- a) [https://www.meted.ucar.edu/hydro/basic\\_int/hydrologic\\_cycle](https://www.meted.ucar.edu/hydro/basic_int/hydrologic_cycle)
- a) [http://nwa.mah.nic.in/DL\\_modules/MRD/mrd.htm](http://nwa.mah.nic.in/DL_modules/MRD/mrd.htm)
- b) [https://www.meted.ucar.edu/hydro/basic\\_int/unit\\_hydrograph/](https://www.meted.ucar.edu/hydro/basic_int/unit_hydrograph/)
- c) [https://www.meted.ucar.edu/hydro/basic\\_int/flood\\_frequency/](https://www.meted.ucar.edu/hydro/basic_int/flood_frequency/)

2) Other:-

[http://wrmin.nic.in/writereaddata/Annexure%20IX%20\(Guideline%20of%20FMP\).pdf](http://wrmin.nic.in/writereaddata/Annexure%20IX%20(Guideline%20of%20FMP).pdf)